

## ABSTRACT

1 In a network of digital signal processor nodes connected  
2 in a peer-to-peer relationship, a data packet sent to a node  
3 causes a return transmission from that node. The requestor  
4 digital signal processor sends a data packet to a target  
5 digital signal processor. Upon arrival at the target digital  
6 signal processor, its receiver drives the arriving request  
7 packet into an I/O memory and triggers a transmitter  
8 interrupt. Next, the pull interrupt causes the transmitter to  
9 execute on a next packet boundary the pull request packet.  
10 Finally, the execution of the pull request causes the  
11 transmitter to pull a portion of the local I/O memory and send  
12 it back to the requestor digital signal processor. The same  
13 physical portion of the I/O memory is overlaid with two  
14 logical uses, a receiver channel and a transmitter code block.